

WE CLAIM:

1. A method of providing services to a mobile terminal within an area serviced by both a wireless network and an Internet Protocol (IP) network, comprising the steps of:

the IP network providing an air interface to the wireless network;

a mobile terminal registering with the IP network via the air interface thereby

allowing the IP network to share the load of servicing the mobile terminal;

a mobile terminal requesting service; and

the IP network providing service to the mobile terminal.

2. The method of claim 1 further comprising the step of providing the wireless terminal with location-specific service.

3. The method of claim 1 further comprising the step of the mobile terminal performing a location update with the IP network.

4. The method of claim 1 further comprising the step of the IP network registering the mobile terminal with the wireless network.

5. The method of claim 1 further comprising the step of the IP network registering the mobile terminal in a Visitor Location Register (VLR).

6. The method of claim 1 further comprising the step of the IP network interfacing with the wireless terminal in emulation of the wireless network.

7. The method of claim 1 further comprising the step of the IP network interfacing with the wireless network in emulation of a Mobile Switching Center (MSC).

Sub
AI

09847072-050201

8. A telecommunications system providing load sharing between a wireless Public Land Mobile Network (PLMN) and an Internet Protocol (IP) network comprising:

a Public Land Mobile Network (PLMN) configured to provide wireless service to mobile terminals throughout a specified service area;

an Internet Protocol network adapted to provide service within a shared service area of said specified service area; and

an interface for operably coupling the Internet Protocol (IP) network to the PLMN;

wherein said IP network is configured to detect service requests from mobile terminals of the PLMN and wherein said IP network is further configured to provide said mobile terminals.

9. The system according to claim 8 wherein the IP network utilizes H.323 protocol.

10. The system according to claim 8 wherein the PLMN is a Global System for Mobile (GSM) network.

11. The system according to claim 8 wherein the IP network further comprises a Radio Base Station (RBS) configured to provide an air interface to mobile terminals of the PLMN.

12. The system according to claim 11 wherein the IP network further comprises a Network Access Controller (NAC) configured to provide the functions of a Mobile Switching Center/Visitor Location Register enabling registration of mobile terminals according to standard PLMN procedures.

13. The system according to claim 12 wherein said IP network includes at least one Service Node (SN) configured to provide location specific services to mobile terminals, said location specific services related to said shared service area.

14. The system according to claim 13 wherein said IP network comprises a Radio Network Server configured to provide the base station controller functions of a PLMN within said shared service area.

15. An Internet Protocol (IP) network supporting the provision of site specific services to mobile terminals comprising:

a Radio Base Station (RBS) providing an air interface for coupling a mobile terminal of a Public Land Mobile Network (PLMN) to the IP network;

a Network Access Controller (NAC) configured to provide the functions of a Mobile Switching Center/Visitor Location Register thereby enabling registration of mobile terminals according to standard procedures of the PLMN; and

a Service Node (SN) configured to provide location specific services to said mobile terminal, said location specific services related to a service area shared by both said PLMN and said IP network.

16. The IP network according to claim 15 wherein the RBS further comprises a Base Station Transceiver (BTS).

17. The IP network according to claim 16 wherein the RBS further comprises an Abis Gateway (AGW).

18. The IP network according to claim 15 further comprising a Media and Signaling Gateway (MSGW) operably coupled to the NAC.

Sub
al
09847072-050201
102050-2204860

19. The IP network according to claim 15 wherein the IP network supports H.323 protocol.

20. The IP network according to claim 15 wherein the PLMN is a Global System for Mobile communication systems (GSM) network.

21. The IP network according to claim 16 wherein the IP network is configured to emulate a PLMN base station compatible with the mobile terminal.

22. The IP network according to claim 16 wherein the IP network emulates a mobile switch compatible with the PLMN.

Sub
ai